

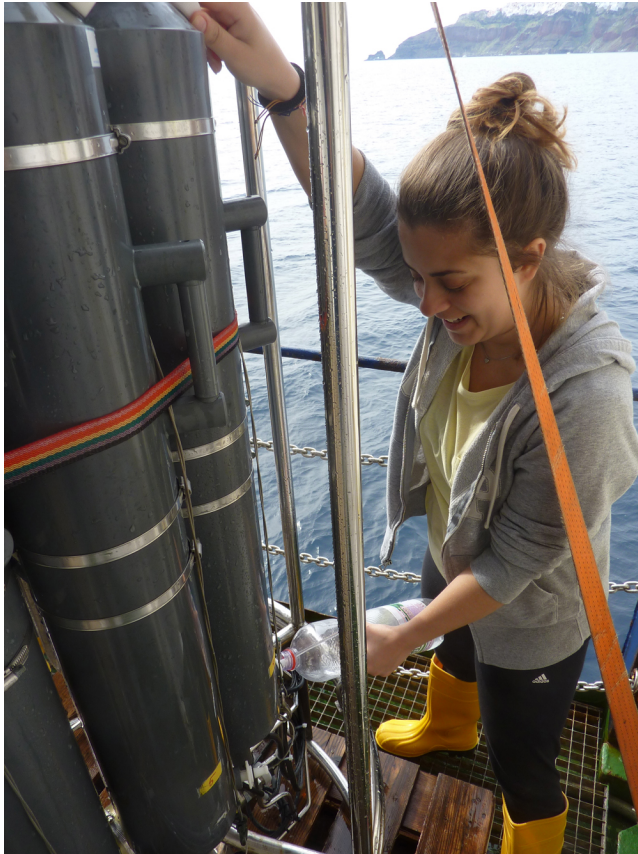
POS 511 Weekly Science Report (17/04/17 to 22/04/17)

Jörg Geldmacher and Scientific Party POS 511

During the last (short) week of this expedition, we completed tasks that were started or deferred in the previous two weeks for various reasons. Rock sampling was mainly conducting within the caldera. The submarine part of the old Akrotiri volcanic center was stratigraphically sampled (through skillful use of the hydraulic manipulator arm of the ROV PHOCA) along three vertical profiles. In addition, numerous excellent samples from other parts of the caldera were obtained during several ROV dives, dredge hauls and wax corer deployments.



Petrologist Dr. Thor Hansteen (GEOMAR) emptying the sample compartments of the ROV PHOCA after a successful dive at the southern caldera wall. Most of these rocks are lava fragments sampled in stratigraphic context and taken directly (in situ) from outcropping flows (Photo: J. Geldmacher).



Master student Theodora Ioannou (University of Athens) taking water samples from the SeaBird Rosette carousel of the CTD in the caldera of Santorin (Photo: J. Geldmacher).

While the ROV completed the last tasks under water, the scientists started with packing and cleaning the ships labs. On Friday evening, April 21, we set sail to Heraklion (Kreta), where we arrived on Saturday morning 09:00, and where Expedition POS 511 ended. In total, we have conducted 6 ROV surveys (photogrammetric mapping), 15 ROV sampling dives, 21 dredge hauls, 43 wax corer deployments, 5 CTD stations (with water sampling) and completed 906 nautical miles of multibeam mapping during the night time. In particular the controlled sampling with the manipulator arm of the ROV PHOCA yielded large numbers of well-preserved volcanic samples and made this cruise very successful.

The scientific party would like to thank Captain Matthias Günther and his officers and crew for their dedication, professionalism and hospitality. We always felt very comfortable on board and look forward to sailing with FS POSEIDON again.